



The *Blurb*



Newsletter of The Phil-Mont Mobile Radio Club
66 Years of Public Service, 1949 to 2015

Volume 66 Number 10

www.phil-mont.org

October 2015

***The Board meets on September 7th, The General Membership Meeting
Is on the 14th***



W3RZY

Norman Dyner, W3RZY, became a silent Key September 18. Norm was a Phil-Mont member and resident of Ann's Choice. A grave - side service took place September 21, 11:30 a.m. at Shalom Memorial Park. Donations in Norm's memory can be made to the GBS/CIDP Foundation International, The Holly Building, 104 1/2 Forrest Avenue, Narberth, Pa., 19072.

de Al Tribble W3STW

Blast from the Past

Phil-Mont membership grew at a phenomenal rate from its founding in 1956 by just five mobile radio hams. It was approaching 100 members according to a report by editor W3PXY exactly sixty years ago in the October 1955 *Blurb*. George went on to relate that club officers were becoming concerned that the ability of the club to provide basic services would be over taxed if many more mobile-oriented hams joined. The *Blurb* itself, for one thing, was duplicated by "Hectograph", or "Ditto," a widely used process of the time that transferred ink from a master sheet carrying the text in reverse in a thick layer of bluish dry ink. The master was dampened and its ink transferred directly to blank paper for quantity duplication. Ink concentration on the master naturally became weaker with each copy, until after 100 copies the printed page was barely readable. [Don't laugh – Xerox was still a long way in the future and cost of offset printing was out of sight.] *continued on page 5*

Oh, and have a scary spooky Halloween!

<i>The Blurb</i> is published monthly by and for the members of The PHIL-MONT MOBILE RADIO CLUB, Inc., whose purpose is to promote Amateur Radio in general, and Mobile Radio in particular. Copying and quoting is permitted with a credit line. We gladly exchange publications with other amateur radio clubs. Requests should be sent to the Editor: Rick DeVigiliis ND3B@ARRL.net Subscriptions are available to non-members for \$12, addressed to the Treasurer. Labels and mailing: KB3IV Submissions deadline: All copy must be in the hands of the Editor by the 20th of the previous month.		Directors: N3QV(15) W3RM(15) K3HWG(15) WA3KIO(16) KB2ERL(16) ND3B(16) W3STW(A)	Contact Phil-Mont: P.O. Box 404 Warminster, PA 18974 http://www.phil-mont.org Website: Eric N3QV & Andrew KC2PMW For club information: Contact any club officer, or the repeaters listed below. Address or club directory changes and articles for the membership e-mail list should be sent to: KB3IV
		Sunday Morning Net Schedules • 2 Meter/ 70cm Net..... at 0930L on W3QV repeater • 10-on-10 Net at 1000L 28.393 MHz USB (±QRM) • 75 meter Net at 1020L 3.993 MHz LSB • ARES at 2100L on the W3QV repeater	
Committees Blurb folding: KB3IV & N3GLU Directory: KB3IV Field Day: KC2PMW Fusion Coord: NC3U	Internet: N3QV & KC2PMW Membership: K3HWG Net Control: KB3IV	Program: W3AOK Publicity: W3RM Refreshments: W3AOK Repeater: W3AOK	Scholarship: W3RM Sunshine: N3GLU VE Program: NS3K Welcome: N3UBY Youth: KC2PMW

All visitors are welcome!

The club meets at 7:00 PM on the *second* non-holiday Wednesday each month except July and August at Giant Supermarket, 315 York Rd, Willow Grove, PA
 Maps and directions are available at www.phil-mont.org.

License Examinations are held on the fourth **non-holiday Thursday** each month at **Community Ambulance Association, 1414 E. Butler Pike, Ambler PA 19002**
 Registration begins at 7:00 P.M. Applicants should contact Jim McCloskey NS3K at 215-275-2979 or jmccloskey@msn.com for the latest information.

Club Stations W3QV/R: The Jim Spencer Memorial Repeater System
 Ridge & Port Royal Avenues, Philadelphia, PA **Trustee: W3RM**
147.03 MHz + PL 91.5 Hz 444.80 MHz + PL 186.2 Hz
 Reach us on EchoLink through W3QV-R
W3AA Trustee: WU3I
W3EM: Field Day/special event station Trustee: N3QV

The Officers

President: WA3GM Greg Malone wa3gm@yahoo.com
Vice President: W3AOK Bill Popovic w3aok@verizon.net
Treas: KB3IV Ed Masarsky kb3iv@comcast.net
Secretary: WU3I Steve Hoch wu3i@arrl.net

The Prez Sez ...



Hello Philmont

Well October is here and welcome to Fall.

We just returned home from a weekend in Vermont with the Roosters Group from 3.990 MHZ of which several Phil-Monters were present. See the picture below or attached or wherever our fine editor put same. (see pg 5) Those Phil-Mont members in attendance were your president Greg WA3GM and Stephanie, Jim WA3QED and XYL Pat, Mike WB3EQW and XYL Carolyn and our Host Jim #5 N0VVV and his XYL Sue. A great time was had by all. We also had a memorial tribute to some of our SK members K3KPE, KB1TJC, and a special sky lantern for Bryan N3VJE.

We resumed our monthly meetings last month at the Giant in Willow Grove.

We had a great presentation last month on Remote Operations presented by yours truly Greg WA3GM, Steve WU3I and Bill W3AOK. Jim N0VVV our member in Vermont also assisted with the demonstration and I would like to thank Steve, Bill and Jim for a job well done.

At this writing I am not sure who our speaker is for October but come on out and we look forward to seeing everyone there. Bring a friend if you can as all are welcome to attend. If anyone has any suggestions for a speaker or would like to speak at one of our meetings please let any of the club officers or board members know. Your input is vital and we welcome all suggestions.

It is also that time of the year again for **ELECTION of OFFICERS** and board members. I will be appointing a nominating committee and will announce who that will be at the monthly meeting. Give it some thought and

make your intentions known to those on the committee. You must be a member in good standing and a Phil-Mont member for at least one year. Elections will be held at our Annual meeting which is the December meeting.

Keep in mind that Old Timers Night will be coming up in November. If you are in touch with an Old Phil-Monter that you don't usually see at a meeting or hear on the repeater try to entice them to come to Old Timers Night as it would be great to see them.

Coming up in January will be our Annual Auction. This is always a fun event. Check your shack for boat anchors and other items you don't need and bring them to the auction. Let our auctioneer sell your wares and you will be helping Phil-Mont in the process. Just a reminder the auction **WILL NOT** be at the GIANT in Willow Grove. We will continue to hold our auction at the Roxboro Memorial Hospital as we have done so for many many years. More on this in future Blurbs.

Don't forget the City to the Shore ride. **Bike MS: City to Shore 2015**-October 3-4, 2015

For more information, please visit the [MS-150 Ham Radio Information Page](#).

October 18 RF Hill Hamfest - Sellersville, PA - RF Hill Amateur Radio Club Sellersville Fire Company, 50 North Main Street, Sellersville, PA; Rt. 309 to Sellersville exit (Main street) firehouse is next to Perkiomen creek near intersection with Diamond Street; Doors open 7 AM.

If anyone has any suggestions for a speaker or would like to speak at one of our meetings please let any of the club officers or board members know. Your input is vital and we welcome all suggestions.

Don't forget to sign up for the Phil-Mont Yahoo Group. We currently have 40+ members. This is a good way to share ideas amongst the membership. Sal NC3U is the moderator the group. For more info and to join the group contact Sal.

Thank you for your support.

73, Greg WA3GM



**Thursday evening VE session is on the
22nd this month.**

As always, many thanks to our VE team!

Phil-Mont Birthdays & Tidbytes

October BIRTHDAYS

- 01 Ed Masarsky - KB3IV
Charlie Phelps - N3OOV
- 02 Donna Stevenson (XYL K3HWE)
- 03 Lisa Brady – KA3VIL(XYL N3CB)
Susan Lamont (XYL N3SHM)
- 05 Domenic Cantarella K3DTC
- 06 Chris Brady – N3CB
Joan Freer (XYL W3YLT)
- 08 Frank Kohn - W3MHP
- 09 Griffin Timm - W3HIA
- 11 Charlye Johnson, Jr. - K3CJ
- 20 Rita Ruhl (XYL N3GBJ)
- 29 Bob Harcarik WA2POW
- 31 Dick Klein – W3WXC

MEMBERSHIP STATS

At press time P.M.R.C. has:
109 FULL PAID MEMBERS
11 FAMILY MEMBERS
2 YOUTH MEMBERS
1 HONORARY MEMBERS

From the secretary

Board Meeting 9/2/15

Due to Steve WU3I's loss, the guest secretary the month is Fred, WA3KIO.

The meeting was called to order at 7:10pm. In attendance was Greg, WA3GM, Bill W3AOK, Bill K3HWG, Dick W3RM, Rick ND3B, Ed KB3IV, and Fred WA3KIO. The treasury report indicated it is doing fine. A check was made for the scholarship fund.

Bill W3AOK reported the repeater is working fine, just a little noise from the Villanova input. Ed reported with our old provider for the repeater discontinuing service, a new service was located with a cost savings. Membership is at 109 members signed and paid.

Rick N3DB had nothing new to report.

Old Business, Dick W3RM reported that the MS society is looking for people for the MS150.

New Business: Ed KB3IV, looking for general meeting programs. One up and coming one will be on remote HF.

December elections are coming up and will be needing a chairman.

The meeting was adjourned at 8:11pm, Bill made the motion, Rick seconded it.

de Fred WA3KIO

General Meeting 9/9/15

WA3GM opened the meeting at 7:09 PM. After a round robin who's who the reports followed.

KB3IV reported that we have money in the treasury.

W3AOK reported the repeaters are all working fine. As it is said at Phil-Mont if it works don't fix it.

NS3K reported that the VE program is doing well upcoming session 9/24 at 7PM.

NC3U reported that the Yahoo group is getting more members.

ND3B reported that the Blurb is fine and to keep them stories coming. Still no elevator repairman.

KB2ERL reported on the upcoming MS150 OCT.

3-4 Still have open spots and what a fun weekend.

WA3GM, W3AOK and WU3I presented a program on Remote operation.

Respectfully submitted, *Steve, WU3I*



N0VVV QTH

What to do? Consideration turned to the possibility of limiting membership to 100, beyond which applicants would have to wait until there was an opening. That expedient was reluctantly adopted for a while but eventually abandoned as the character of the club changed from a bunch of close-knit ardent mobile and emergency operators and builders, to just one more plain vanilla “radio club.” Phil-Mont’s activities became indistinguishable from what all the other clubs in the region were doing. That sameness combined with fundamental changes in amateur radio made membership self-limiting, as we see today.

de W3NE

Don’t touch that dial, there’s more from Bob!

AN RF CONTROL CENTER

Convenience in station operation

Bob Thomas, W3NE

With antenna issues resolved as best as possible under circumstances described last time, attention turned to arranging equipment connections for greatest operating convenience. The basic station consists of a Yaesu FT_{DX}-3000 transceiver and a restored Heathkit SB-220 linear amplifier. The linear is used with full appreciation that an investment in antenna improvements usually yields a stronger signal at the receive end than the same expenditure for an increase in transmitter power. That might be true in most cases, but antenna performance here is as good as it’s going to get, which is to say, “Not so great.” Therefore, the only way to radiate a stronger signal is QRO. Finally, as we all know, there is a lot more to a modern ham station than the transmitter and antenna, so these additional functions were considered vital for the new W3NE:

1. Linear Amp Bypass Improvement. The SB-220 has an internal relay that enables the transceiver to be connected directly to the antenna for barefoot operation or through the linear amp for QRO. RF switching is by a common power relay having marginal insulation and inferior input/output isolation for RF. Bypassing is best accomplished with an external coaxial relay.



The memorial sky lantern for Bryan, N3VJE

Blast From the Past *from cover*

And that wasn’t the only concern! Members in those days were active, *really active*, throughout the day and especially during evenings and weekends with their 10M mobile or fixed-frequency intercom stations. At times Channel 1 could be operating over capacity with four stations in a round table and two more waiting to use the frequency or moving over to secondary Channel-2. That might be an inconceivable situation when viewed in light of ghostly dead time on our repeater today. There was justifiable concern that more growth would make a marginal traffic situation even worse.

2. Convenient antenna tuning. In the unique operating situation presented by a screwdriver dipole antenna, it is frequently necessary to display its SWR on a graphical analyzer to facilitate rapid re-tuning of the antenna for in-band QSY's of 40 kHz or more, and when changing bands.

3. Dummy load availability. There must be easy access to a high power dummy load for initial tuning of the transceiver and linear amplifier to avoid interfering with a QSO in progress or causing other infractions routinely committed by thoughtless QRM factories.

4 Continuous displays of SWR & Power. It is desirable to continuously monitor SWR and power level at the transceiver output and linear amplifier output during transmissions.

It was decided early on, in deference to the Chief Op's wobbly mobility at an advanced age, to make all of the above functions *switch-selectable* from a single, centrally located control point. A single enclosure houses all required coaxial relays, SWR detectors, interconnecting coax cables, mode selector switches and status indicators. That enclosure is also the central location of coax jacks for permanent RF connections to the transceiver, linear amp, antenna, dummy load, and SWR analyzer. Centralized functions are in contrast to times past when there was an octopus of coax cables scrambled over and around miscellaneous auxiliary equipment at the back of the operating desk. Even with two B&W coaxial rotary switches added to the mish-mash it remained a sloppy, unhandy way to make routine changes in station configuration.

The cure for all the undesirable situations cited above began with a new RF Control Center in a Hammond 7"x8"x10" steel enclosure. The linear amp is now bypassed by a DPDT coax relay mounted on the inside surface of the rear panel by two of its SO-239 connectors. Its connectors pass through the panel and are held in place with lock nuts on the outside. The two protruding coax jacks are for connections to the linear amp's Input and Output. Each of two SPDT coax relays is similarly mounted on the rear panel by one SO-239 connector and an external lock nut. The protruding SO-239 jack from one of those relays feeds to a remotely

located dummy load; the other one is the antenna connector. Transceiver RF enters the box through an SO-239 bulkhead connector. 12 Volts dc for relay coils and status indicator lights enters through a 2.1 mm coaxial power jack. Two CAT-5 feedthrough jacks are provided for connections between an Elecraft W-2 SWR/Power Dual Display and its two in-line remote pickups, which are housed inside the control box. All signal connections inside the enclosure are made through short lengths of RG-8X with PL-259 connectors to maintain integrity of RF paths.

Figure 1 is a photo of the station layout. Controls for receiving loop rotator and screwdriver dipole tuning are on the desktop below the transceiver. A 600-Watt dummy load is out of the way on a window sill. Antenna signal and control cables pass through a weatherproof Delrin filler strip at the bottom of the window. The Control Center is conveniently located between the FT_{DX}-3000 and SB-220, where it can be permanently connected to all equipment with short coax cables. This setup has made station operation a breeze, with only three switches to easily configure the station for any purpose without having to leave the operating position.

There are three toggle switches with associated indicator lights on the Control Center's front panel to control internal coaxial relays. Control circuit wiring between front and rear panels is through a single cable and Jones connector mounted on the inside of the rear panel. Now refer to the Partial Schematic Figure 2 to supplement the station photo. The left-hand switch **S1** operates a DPDT linear amp bypass relay to direct transceiver RF either straight through (linear amp bypass), or to the SB-220 input. Center switch **S2** controls a SPDT coax relay that connects transceiver or linear amplifier outputs (as predetermined by **S1**) either to the antenna or to an external dummy load. For antenna tuning, **S3** energizes a second SPDT coax relay to transfer the antenna to a front panel BNC jack where an SWR analyzer can be conveniently connected.

As a safety measure to prevent an inattentive operator (guess who) from accidentally feeding high

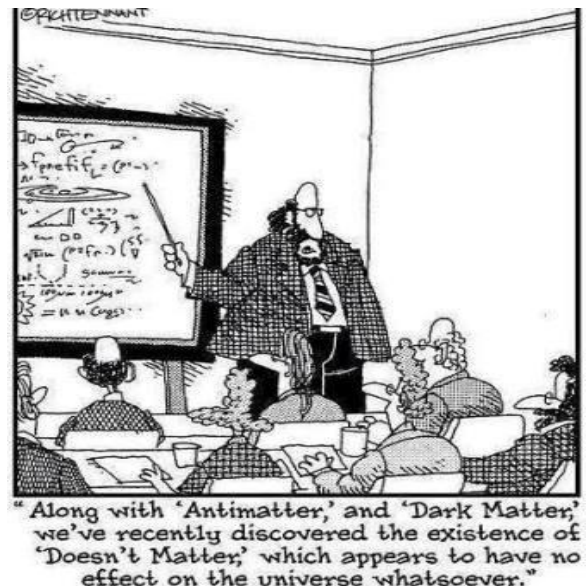
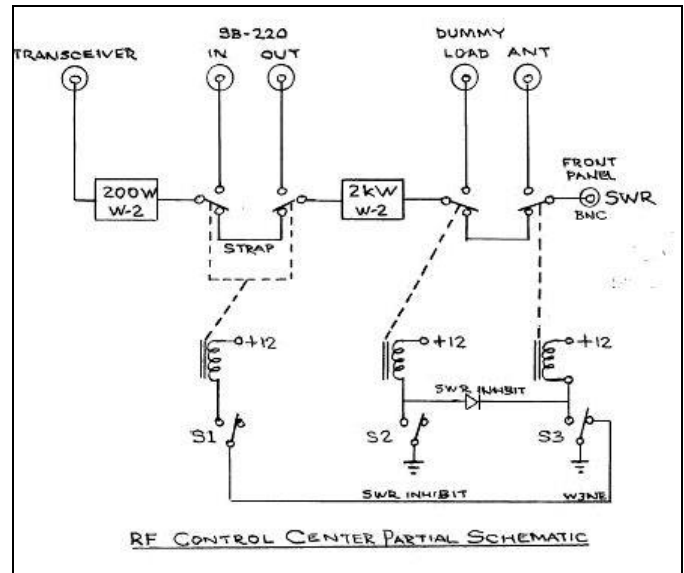
level transmit RF into the analyzer, S3 also overrides selections of the other two switches whenever the antenna is fed to the SWR BNC jack. Interlocking circuits force transceiver output to the dummy load where it can do no harm, and inhibits excitation of the linear amplifier. A bright red LED flashes to supplement the S3 pilot light and reinforce operator recognition that the SWR measurement mode is activated.

Toward the end of construction WB3LGG suggested inclusion of an RF sampler in the enclosure for monitoring AM and SSB RF envelopes. That is a good idea but the project was nearly completed and there was a strong urge to finish it without further delay. As a compromise, BNC and RCA connectors were added to the rear cover for eventual connection to, respectively, direct and rectified RF envelopes.

Building the Control Center has been an absorbing and operationally rewarding project. Gone are the days of having to unscrew and re-connect multiple PL-259 connectors every time a different station setup was needed. Rapid change between barefoot and QRO is now easily and instantly accomplished through coaxial RF circuits of high integrity. No more running outside to re-tune the antenna for all but narrowest QSY. Simultaneous displays of SWR and power at transceiver and SB-220 outputs assure the operator the system is performing properly. But most important, all this is possible without the Chief Op having to get his lazy fanny off the chair!



NE operating position



October at Phil-Mont

4 Sun W3MHP
7 Wed Board Meeting
11 Sun KB3SJS
12 Mon Columbus Day
14 Wed General Meeting
18 Sun KB3IV
22 Thurs Evening VE session
25 Sun WU3I
31 Sat Halloween

**Note the New net - 9:00PM Tuesday night on
29.493MHz AM mode**

**Don't forget the ARES net on Sunday nights and
the Digital net on Tuesday nights.**

For Sale

**1/8" (290#) & 3/16" (380#) Dark Olive Drab
Braided Cord · 100% Polyester/Dacron Knit
Braided. Nice stuff! Tough and long lasting · UV
Resistant and Low Stretch Proudly Made in the
U.S.A.! Contact Steve WU3I at wu3i@arrl.net or
215-605-6074**

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First Class Mail

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